**REMARKS/ARGUMENTS**

Claims 1-4, 17-20, 33, 35-37, 49-52, 63-66, 77-80, and 93-96 are pending. Claims 1-4, 17-20, 33, 35-37, 49-52, 63-66, 77-80, and 93-96 are amended. The Examiner has not acknowledged receipt of the IDS that was filed on February 6, 2004. Applicants respectfully request acknowledgment of the above-mentioned IDS by initialing and returning the attached copy of the same IDS.

The drawings were objected to because the margins, size of numbers, letters, and reference characters are incorrect. The attached formal drawings include changes to correct margins, size of numbers, letters, and reference characters are incorrect. These sheets replace the original drawings. Accordingly, it is respectfully requested that the above objections to the drawings be withdrawn.

Claims 1, 17, 33, 49, 63, 77 and 93 are rejected under 35 U.S.C. 102(b) as being anticipated by Cox et al. (US 5,790,781). Claims 2, 18, 35, 50, 64, 78, and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox, in view of Sanders et al (6,704,308). Claims 3, 4, 19, 20, 36, 37, 51, 52, 65, 66, 79, 80, 95 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox in view of Picart (US 5,745,736). Applicant submits that all of the claims currently pending in this application are patentably distinguishable over the cited references, and reconsideration and allowance of this application are respectfully requested.

Independent claims 1, 49, and 77 include, among other limitations, "adjusting adaptation speed of an echo canceller

for processing the signal, when the estimated complexity exceeds a threshold;" independent claims 17, 63, and 94 include, among other limitations, "adjusting adaptation speed of the echo cancellation function, when the sum of the estimated average complexities exceeds a threshold;" and independent claim 33 includes, among other limitations, "a resource manager that estimates signal processor complexity and adjusts adaptation speed of an echo canceller for processing the signal when the estimated complexity exceeds a threshold."

None of the cited references, alone or in combination, teach or suggest the above-recited limitations. For instance, Cox does not disclose adjusting adaptation speed of an echo canceller [or echo cancellation function], when the estimated complexity [or the sum of the estimated average complexities] exceeds a threshold. Furthermore, there is no teaching or suggestion in Cox for estimating signal processing complexity [or average complexity]. The "real-time errors caused by exhaustion of available processor MIPS" (Office action, page 3, middle of the second paragraph) are not the same as estimating signal processing complexity [or average complexity]. Therefore, independent claims 1, 17, 33, 49, 63, 77, and 93 are not anticipated by Cox.

Sanders discloses an apparatus and method for data processing in a multiple-DSP architecture. For digitized voice data that does not require echo cancellation, a time-slot interchanger (TSI) 306 "routes the data directly to the data compression DSPs via the shared and dedicated TDM buses, bypassing the echo canceller DSPs." (Col. 8, lines 13-16).

This does not teach or suggest adjusting adaptation speed of an echo canceller for processing the signal, as recited by the independent claims 1, 17, 33, 49, 63, 77, and 93. Furthermore, there is no teaching or suggestion in Sanders for estimating signal processing complexity [or average complexity]. Accordingly, independent claims 1, 17, 33, 49, 63, 77, and 93 are patentable over sanders, alone or in combination with Cox.

Picart discloses an information processing method wherein processing tasks are prioritized and performed in order of priority. The method of Picart teaches "processing a stream of information in accordance with at least two series of sequential processing tasks, each of said series being executed in order of priority based on occurrence in said stream of priority determinative events respectively assigned to the respective series; said method comprising: detecting the presence in said stream of a priority determinative event during execution of one of said series, and in response thereto interrupting execution of tasks in said one series and initiating execution of one or more of the tasks in an other of said series to which the detected event is assigned." (Claim 1, col. 4, lines 14-25, emphasis added).

The system of Picart includes an echo cancellation task (TR2) that is of a lower priority than a modulation task (TR1). The echo canceller of Picart "is an adaptive filter whose convergence period coincides with a highly reduced receiving task. The moment the convergence has been effected, the adaptation of the filter is a slow process and becomes a task of low priority." (Col. 2, lines 38, emphasis added). Thus, the

execution of the lower priority task of filter adaptation is interrupted, when a higher priority task (e.g., data modulation) needs the processing time of the modem.

As a result, Picart, alone or in combination with Cox and/or Sanders, does not teach or suggest adjusting adaptation speed of an echo canceller for processing the signal, when the estimated complexity [or the sum of the estimated average complexities] exceeds a threshold, as recited by the independent claims 1, 17, 33, 49, 63, 77, and 93. Furthermore, there is no teaching or suggestion in Picart for estimating signal processing complexity [or average complexity]. Accordingly, independent claims 1, 17, 33, 49, 63, 77, and 93 are patentable over sanders, alone or in combination with Cox.

Dependent claims 2, 18, 35, 50, 64, 78, and 94 include the additional limitation of bypassing the echo canceller [or echo cancellation] and suppressing echo of the signal by an echo suppressor [or echo suppression means] instead, when the estimated complexity exceeds a threshold. None of the cited references, alone or in combination, teach or suggest the above recited limitation. Therefore, dependent claims 2, 18, 35, 50, 64, 78, and 94 are also patentable over the cited references as being dependent from allowable independent claims and for the additional limitations they include therein.

Dependent claims 3, 36, 51, 65, 79, and 95 include the additional limitation of estimating echo return loss enhancement (ERLE) of the echo canceller. None of the cited references, alone or in combination, teach or suggest the above recited limitation. Therefore, dependent claims 3, 36, 51, 65, 79, and

95 are also patentable over the cited references as being dependent from allowable independent claims and for the additional limitations they include therein.

In short, the independent claims 1, 17, 33, 49, 63, 77, and 93 define a novel and unobvious invention over the cited references. Dependent claims 3-4, 18-20, 35-37, 50-52, 64-66, 78-80, and 94-96 are dependent from independent claims1, 17, 33, 49, 63, 77, and 93, respectively and include all the limitations of their respective independent claims and additional limitations therein. Accordingly, these claims are also allowable over the cited references, as being dependent from allowable independent claims and for the additional limitations they include therein.

In view of the foregoing remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested.

Respectfully submitted,
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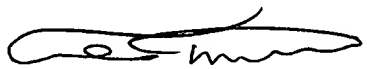
By 

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